

*Subj. amended.*  
*18 amended.*

--18. (Three Times Amended) A system for managing bandwidth of a remote link comprising:  
a Virtual Private Network (VPN) server;  
a contention pool having a portion of the bandwidth for at least one application group;  
and  
a meter for metering packets belonging to the application group; and  
a user interface that allows a user to specify the assigned portion of the bandwidth;  
wherein the VPN server is configured to at least one of authenticate, encapsulate, and de-encapsulate at least a portion of the packets.--

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#### REMARKS

By this amendment, claims 1, 3, 5, 8, 9, 10, 12, 14, 17 and 18 have been amended.

Currently, claims 1, 3-10, and 12-18 are pending in this application.

Examiner Duong is thanked for the courtesies extended during the telephone interview on February 5, 2003. During the interview the differences between Ma (U.S. Patent No. 5,953,338) and the present invention were discussed. Agreement was reached that the claims would not be anticipated by Ma if the claims were amended to recite that the VPN server is a network device that performs authentication, encapsulation and/or de-encapsulation of packets. Applicants have amended the claims in a manner consistent with the discussions. Accordingly, applicants respectfully request that the rejection under 35 U.S.C. 102(e) of the pending claims over Ma be withdrawn.

Reply Dated February 10, 2003  
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Conclusion

In view of foregoing claim amendments and remarks, it is respectfully submitted that the application is now in condition for allowance and an action to this effect is respectfully requested. If there are any questions or concerns regarding the amendments or these remarks, the Examiner is requested to telephone the undersigned at the telephone number listed below.

If any fees are due in connection with this filing, the Commissioner is hereby authorized to charge payment of the fees associated with this communication or credit any overpayment to Deposit Account No. 502246 (Ref: NN-13361).

Respectfully Submitted

A handwritten signature in black ink, appearing to read "John C. Gorecki", written over a horizontal line.

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**VERSION WITH MARKINGS TO SHOW CHANGES MADE**

Submitted herewith is a marked-up version of the amended claims to show changes made in the foregoing Amendment.

**IN THE CLAIMS**

Claims 1, 3, 5, 8, 9, 10, 12, 14, 17 and 18 have been amended as follows:

--1. (Twice Amended) A method for a server that manages bandwidth of a remote link, comprising:

assigning a portion of the bandwidth to at least one application group; and

metering packets belonging to the application group;

wherein the server is a [VPN] Virtual Private Network (VPN) server configured to at least one of authenticate, encapsulate, and de-encapsulate at least a portion of the packets.--

-- 3. (Three Times Amended) A method for a [VPN] Virtual Private Network (VPN) server that manages bandwidth of a remote link, comprising:

assigning a portion of the bandwidth to at least one application group; and

metering packets belonging to the application group;

wherein the server is directly connected to other links having larger bandwidth than the available bandwidth of the remote link; and wherein the VPN server is configured to at least one of authenticate, encapsulate, and de-encapsulate at least a portion of the packets.--

--5. (Three Times Amended) A method for a [VPN] Virtual Private Network (VPN) server that manages bandwidth of a remote link, comprising:

assigning a portion of the bandwidth to at least one application group; and

metering packets belonging to the application group;

wherein the packets belonging to the application group contend equally for the portion of the bandwidth; and wherein the VPN server is configured to at least one of authenticate, encapsulate, and de-encapsulate at least a portion of the packets.--

--8. (Three Times Amended) A method for a [VPN] Virtual Private Network (VPN) server that manages bandwidth of a remote link, comprising:  
assigning a portion of the bandwidth to at least one application group;  
metering packets belonging to the application group; and  
allowing a user to specify the bandwidth of the remote link from a user interface;  
wherein the VPN server is configured to at least one of authenticate, encapsulate, and de-encapsulate at least a portion of the packets.--

--9. (Three Times Amended) A method for a [VPN] Virtual Private Network (VPN) server that manages bandwidth of a remote link, comprising:  
assigning a portion of the bandwidth to at least one application group;  
metering packets belonging to the application group; and  
allowing a user to specify the portion of the assigned bandwidth from a user interface;  
wherein the VPN server is configured to at least one of authenticate, encapsulate, and de-encapsulate at least a portion of the packets.—

--10. (Twice Amended) A system for managing bandwidth of a remote link comprising:  
a server;

a contention pool having a portion of the bandwidth for at least one application group;  
and  
a meter for metering the packets belonging to the application group;  
wherein the server is a [VPN] Virtual Private Network (VPN) server configured to at least one of authenticate, encapsulate, and de-encapsulate at least a portion of the packets.--

--12. (Three Times Amended) A system for managing bandwidth of a remote link comprising:

a [VPN] Virtual Private Network (VPN) server;  
a contention pool having a portion of the bandwidth for at least one application group;  
and  
a meter for metering [the] packets belonging to the application group;  
wherein the server is directly connected to other links having larger bandwidth than the available bandwidth of the remote link; and wherein the VPN server is configured to at least one of authenticate, encapsulate, and de-encapsulate at least a portion of the packets.--

--14. (Three Times Amended) A system for managing bandwidth of a remote link comprising:

a [VPN] Virtual Private Network (VPN) server;  
a contention pool having a portion of the bandwidth for at least one application group;  
and  
a meter for metering [the] packets belonging to the application group;

wherein the packets belonging to the application group contend equally for the contention pool; and wherein the VPN server is configured to at least one of authenticate, encapsulate, and de-encapsulate at least a portion of the packets.--

--17. (Three Times Amended) A system for managing bandwidth of a remote link comprising:

a [VPN] Virtual Private Network (VPN) server;

a contention pool having a portion of the bandwidth for at least one application group;

and

a meter for metering [the] packets belonging to the application group; and

a user interface that allows a user to specify the bandwidth of the link;

wherein the VPN server is configured to at least one of authenticate, encapsulate, and de-encapsulate at least a portion of the packets.--

--18. (Three Times Amended) A system for managing bandwidth of a remote link comprising:

a [VPN] Virtual Private Network (VPN) server;

a contention pool having a portion of the bandwidth for at least one application group;

and

a meter for metering [the] packets belonging to the application group; and

a user interface that allows a user to specify the assigned portion of the bandwidth;

wherein the VPN server is configured to at least one of authenticate, encapsulate, and de-encapsulate at least a portion of the packets.--